

CLAIMS:

What is claimed is:

1. (Currently Amended) A marine vessel having a plurality of separate liquid cargo tanks located below the deck plate, the tanks having a generally highest point above the baseline of the [[ship]] vessel, at least a portion of the deck plate being located above each tank and each tank having a highest point available above the baseline of the [[ship]] vessel, the improvement which comprises a plurality of apertures in said deck plate communicating with the respective tank therebelow, said plurality of apertures being positioned ~~substantially as close to~~ proximate the highest point of the tank above the baseline of the [[ship]] vessel, and at least one separate and individual expansion trunk positioned on said deck plate and over said apertures, said trunk having an interior volume of at least 2% of the ~~volume of the respective tank therebelow for liquid cargo storage~~ total capacity of the tank, and being between about 10 to 40 meters in length, about 5 to 15 meters wide, and about 2 to 3 meters high, said trunk being located directly above the respective tank therebelow and as far forward as possible with respect to said tank, said trunk further being secured in a fluid-tight relation with said deck plate and surrounding said plurality of apertures in said deck plate above each said respective tank to prevent leakage therebetween, to form an exclusive expansion space to serve the liquid cargo in the respective tank therebelow, said expansion trunk being in fluid communication with ~~pipelines~~ the venting system used for the venting of the tank.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Original) The vessel according to claim 1, wherein said apertures in the deck are positioned in one or more deck plates.

7. (Previously Presented) The vessel according to claim 1, wherein said apertures in said deck plate are located directly over each associated tank and as far aft of the tank as possible.

8. (Cancelled)

9. (Currently Amended) A system for fluid storage for transport, which comprises a plurality of separate liquid cargo tanks located below a deck plate of a marine vessel, a portion of the deck plate located above each tank being provided with a plurality of apertures communicating with the tank therebelow, said plurality of apertures being positioned proximate the highest point of the tank above the baseline of the vessel, and at least one separate and individual expansion trunk located directly above the respective tank therebelow and as far forward as possible with respect to said tank, each said expansion trunk ~~[[has]]~~ having dimensions of between about 10 and 40 meters in length, about 5 and 15 meters in width, and about 2 and 3 meters in height, said trunk having an interior volume of at least 2% of the total capacity of the tank, each said trunk further being secured in fluid-tight relation with the respective deck plate and surrounding said plurality of apertures in the deck plate above each associated tank to prevent leakage therebetween, to thereby form an exclusive expansion space to serve the fluid cargo in the respective tank therebelow, said apertures being elongated slots between approximately 2 and 3 centimeters wide

and about one-half the length of the deck plate, such that there is approximately less than 0.5 pound per square inch pressure difference between the opposing tank side and trunk side of said associated deck plate when the tank is being loaded at 200% of its maximum load rate, as determined by the pump, venting, and terminal restriction systems of the vessel, said expansion trunk ~~including~~ pipelines being in fluid connection with the venting system used for venting the tank and enclosing a volume at least that required for maritime regulations for an expansion space for liquid cargo storage, said at least one trunk not being associated with pipelines to receive fluids from said tank.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) The system according to claim 9, wherein each said expansion trunk includes a crude oil washing pipeline and is configured for being connected with one or more of a removable crude oil washing machine or an installed crude oil pipeline washing machine.

15. (Original) The system according to claim 14, wherein each said expansion trunk includes at least one side wall and a top wall, said side wall and top wall each having inner sides, said inner sides being at least substantially free from one or more primary structural members of said trunk.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) The system according to claim 9, wherein each said trunk includes an alternative vent line and the associated tank has a highest point in the tank above the baseline of the [[ship]] vessel; said alternative vent line being in fluid communication with the highest point in the tank above the baseline of the ship.

21. (Currently Amended) A marine vessel comprising a plurality of liquid cargo tanks located below deck plates of a deck, and each tank having a portion of a respective deck plate as a highest point above the baseline of the [[ship]] vessel, which comprises:

a plurality of trunks positioned on the respective deck plates above each said tank, each respective deck plate being provided with a plurality of apertures communicating with the respective tank therebelow, the portion of the tank located at the highest point above the baseline of the [[ship]] vessel being in communication with each said trunk, and each said trunk being located directly above the respective tank therebelow and as far forward as possible with respect to the respective tank, each said trunk being secured in fluid-tight relation with the deck plate above each said associated tank, to thereby form an exclusive expansion space to serve the liquid cargo in the tank therebelow, said apertures being positioned proximate the highest point of the tank above the baseline of the vessel, and being elongated slots between approximately 2 and 3 centimeters wide and about one-half the length of the deck plate, such that there is approximately less than 0.5 pound per square inch pressure difference between the opposing tank side and trunk side of said associated deck plate when the tank is being loaded at 200% of its maximum load rate, as determined by the

pump, venting, and terminal restriction systems of the vessel, each said expansion trunk being in fluid communication with ~~pipelines~~ the venting system used for the venting of the respective tank, and a vent pipeline in communication with each said trunk, which uses the liquid cargo pressure to force vapors from a first highest point in the tank to a second highest point location in the tank.

22. (Previously Presented) The marine vessel according to claim 21 wherein each said trunk is located above a portion of the tank located at the highest point above the baseline of the vessel, the portion of the tank above the highest point including one or more deck plates, the one or more deck plates having a plurality of elongated slots located within the periphery of said fluid-tight structure of said trunk and deck plates, and in fluid communication with said tank.

23. (Previously Presented) The marine vessel according to claim 21 wherein each said trunk is located above a portion of the tank, the portion of the tank being above the highest point thereof, said trunk being in liquid communication with the tank through a plurality of elongated slots in the associated deck plates beneath said trunk.

24. (Currently Amended) A marine vessel having a plurality of separate liquid cargo tanks located below the deck plate, the tanks having a generally highest point above the baseline of the ~~[[ship]]~~ vessel, at least a portion of the deck plate being located above each tank and as close as possible to the highest point above the baseline of the ~~[[ship]]~~ vessel, each said expansion trunk ~~[[has]]~~ having dimensions of between about 10 and 40 meters in length, about 5 and 15 meters in width, and about 2 and 3 meters in height, the improvement which comprises a plurality of apertures communicating with the tank below, said apertures being positioned proximate the highest point of the tank above the baseline of the vessel, and at least one separate

and individual expansion trunk located directly above the respective tank therebelow and as far forward as possible with respect to the respective tank, each said trunk being secured in fluid-tight relation with said deck plate and surrounding said plurality of openings in the deck plate above each tank to prevent leakage therebetween, to thereby form an expansion space to serve the cargo in the tank below, said expansion trunk being in fluid communication with the venting system used for the venting of the tank, said apertures being elongated slots between approximately 2 and 3 centimeters wide and about one-half the length of the deck plate, such that there is approximately less than 0.5 pound per square inch pressure difference between the opposing tank side and ~~trunks~~ trunk side of said associated deck plate when the tank is being loaded at 200% of its maximum load rate ~~said at least one trunk not being associated with any pipelines to receive fluids from said tank~~ as determined by the pump, venting and terminal restriction systems of the vessel.

25. (Cancelled)

26. (Currently Amended) A marine vessel having a plurality of separate cargo tanks located below the deck plate, the tanks having a generally highest point above the baseline of the ~~[[ship]]~~ vessel, at least a portion of the deck plate being located above each said tank and each said tank having a highest point available above the baseline of the ~~[[ship]]~~ vessel, the improvement which comprises a plurality of apertures in said deck plate communicating with the respective tank therebelow, said plurality of apertures being positioned substantially as close to the highest point of the respective tank above the baseline of the ~~[[ship]]~~ vessel, and at least two separate expansion trunks positioned on said deck plate and over said apertures, said trunks being located directly above the respective tank therebelow and as far forward as possible with respect to the respective

tank, each said trunk being secured in fluid-tight relation with said deck plate and surrounding said plurality of apertures in said deck plate above each said respective tank to prevent leakage therebetween, to thereby form an expansion space to serve the liquid cargo in the respective tank therebelow, each said expansion trunk being in fluid communication with the venting system used for the venting of the tank, said expansion trunks being in fluid communication with each other through at least one pipeline located at the highest point of the respective tank for the venting of the respective tank, said apertures being elongated slots between approximately 2 and 3 centimeters wide and about one-half the length of the deck plate, such that there is approximately less than 0.5 pound per square inch pressure difference between the opposing tank side and trunk side of said associated deck plate when the tank is being loaded at 200% of its maximum load rate as determined by the pump, venting, and terminal restriction systems of the vessel, and a vent pipeline in communication with each said trunk, which uses the liquid cargo pressure to force vapors from a first highest point in the tank to a second highest point location in the tank.